Figure 1. Survey: Exercise After Breast Reconstruction Surgery

- 1. To which gender identity do you most identify as? (Response rate: 228 answered, 0 omitted)
 - a. Male
 - b. Female
 - c. Prefer not to identify
 - d. Other (please specify)
- 2. What category best represents your age? (Response rate: 228 answered, 0 omitted)
 - a. Under 35
 - b. 35-44
 - c. 45-54
 - d. 55-64
 - e. 65 and older
- 3. How many years have you been in practice? (Response rate: 228 answered, 0 omitted)
 - a. Less than 5
 - b. 5-9
 - c. 10-14
 - d. 15-19
 - e. 20-24
 - f. 25 years or more
- 4. In which geographic region do you practice? (Response rate: 228 answered, 0 omitted)
 - a. New England (CT, MA, ME, NH, RI, VT)
 - b. Middle Atlantic (MD, NJ, NY, PA)
 - c. East North Central (IL, IN, MI, OH, WI)
 - d. West North Central (IA, KS, MN, MO, NE, ND, SD)
 - e. South Atlantic (DE, DC, FL, GA, MD, NC, SC, VA, WV)
 - f. East South Central (AL, KY, MS, TN)
 - g. West South Central (AR, LA, OK, TX)
 - h. Mountain (AZ, CO, ID, NM, MT, UT, NV, WY)
 - i. Pacific (AK, CA, HI, OR, WA)
- 5. Do you routinely perform breast reconstruction in your practice? (**Response rate: 228 answered, 0 omitted**)
 - a. Yes allowed to continue survey
 - b. No excluded from remainder of survey
- 6. What type(s) of breast reconstruction do you perform on a regular basis? Check all that apply. (**Response rate: 202 answered, 23 exluded from survey, 3 omitted**)
 - a. Implant reconstruction (subpectoral)
 - b. Implant reconstruction (prepectoral)
 - c. DIEP flap reconstruction (or other perforator autologous breast reconstruction)

- d. TRAM flap reconstruction
- e. Latissimus dorsi muscle flap reconstruction
- f. Other (please specify)
- 7. Approximately how many breast reconstruction operations did you perform in the last year? (**Response rate: 202 answered, 23 exluded from survey, 3 omitted**)
 - a. 0 25
 - b. 26 50
 - c. 51 75
 - d. 76 100
 - e. 101 or more
- 8. Approximately what percentage of your patients do you prescribe physical therapy for after breast reconstructive surgery? (Response rate: 202 answered, 23 exluded from survey, 3 omitted)
 - a. 0%
 - b. 1 25%
 - c. 26 50%
 - d. 51 75%
 - e. 76 100%
- 9. How soon after surgery do your patients start physical therapy? (Response rate: 165 answered, 23 exluded from survey, 40 omitted)
 - a. Immediately
 - b. 1-2 weeks postoperatively
 - c. 2-3 weeks postoperatively
 - d. 3-4 weeks postoperatively
 - e. >4 weeks postoperatively
 - f. Not applicable I do not recommend that my patients participate in physical therapy
- 10. Do you provide the physical therapist with specific instructions regarding limitations? (**Response rate: 165** answered, 23 exluded from survey, 40 omitted)
 - a. Yes
 - b. No
 - c. I do not prescribe physical therapy
- 11. Do you provide your patients with specific instructions for post- operative exercises and limitations? (Response rate: 200 answered, 23 exluded from survey, 5 omitted)
 - a. Yes
 - b. No
- 12. Implant reconstruction (subpectoral): (Response rate: 143 answered, 23 exluded from survey, 62 omitted)

Arm	Lifting > 10		Returning	Returning
elevation	lbs.	to ADLs	to light	to vigorous
above			exercise	exercise/

	shoulder		sports
<1 week			
1-2 weeks			
2-4 weeks			
4-6 weeks			
>6 weeks			

13. Implant reconstruction (prefectural) (Response rate: 127 answered, 23 exluded from survey, 78 omitted)

	Arm elevation above shoulder	Lifting > 10 lbs.	Returning to ADLs	Returning to light exercise	Returning to vigorous exercise/ sports
<1 week					
1-2 weeks					
2-4 weeks					
4-6 weeks					
>6 weeks					

14. DIEP flap reconstruction (or other perforator autologous breast reconstruction) (**Response rate: 55** answered, 23 exluded from survey, 150 omitted)

	Arm elevation above shoulder	Lifting > 10 lbs.	Returning to ADLs	Returning to light exercise	Returning to vigorous exercise/ sports
<1 week					
1-2 weeks					
2-4 weeks					
4-6 weeks					
>6 weeks					

15. TRAM flap reconstruction (Response rate: 50 answered, 23 exluded from survey, 155 omitted)

	Arm elevation above shoulder	Lifting > 10 lbs.	Returning to ADLs	Returning to light exercise	Returning to vigorous exercise/ sports
<1 week					
1-2 weeks					
2-4 weeks					
4-6 weeks					
>6 weeks					

16. Latissimus dorsi flap reconstruction (Response rate: 109 answered, 23 exluded from survey, 96 omitted)

	Arm elevation above shoulder	Lifting > 10 lbs.	Returning to ADLs	Returning to light exercise	Returning to vigorous exercise/ sports
<1 week					
1-2 weeks					
2-4 weeks					
4-6 weeks					
>6 weeks					

17. Other type of breast reconstruction (Response rate: 14 answered, 23 exluded from survey, 191 omitted)

	Arm elevation above shoulder	Lifting > 10 lbs.	Returning to ADLs	Returning to light exercise	Returning to vigorous exercise/ sports
<1 week					
1-2 weeks					
2-4 weeks					
4-6 weeks					
>6 weeks					

18. Do you think exercise can increase or decrease postoperative pain? (**Response rate: 194 answered, 23 exluded from survey, 11 omitted**)

a. Increases

- b. Decreases
- c. Neither
- 19. Do you think physical therapy can increase or decrease postoperative pain? (**Response rate: 194 answered, 23 exluded from survey, 11 omitted**)
 - a. Increases
 - b. Decreases
 - c. Neither
- 20. Who do you think should be responsible for discussing postoperative exercise/PT protocols with patients? (Response rate: 194 answered, 23 exluded from survey, 11 omitted)
 - a. Plastic surgeon
 - b. Oncologist
 - c. Nurse
 - d. Physical therapist
 - e. Occupational therapist
 - f. Online resource or society guidelines
 - g. Other please specify
 - h. N/A
- 21. What are barriers to discussion about exercise/PT protocols with postoperative patients? (Select all that apply) (Response rate: 194 answered, 23 exluded from survey, 11 omitted)
 - a. Limited knowledge on how or where to refer a patient
 - b. Limited time during a patient visit
 - c. Not feeling qualified to discuss exercise or PT with a patient
 - d. Not convinced of the literature with respect to exercise or PT after breast reconstruction
 - e. Do not feel exercise is relevant to the patient's postoperative care
 - f. Feel that exercise/PT could lead to postoperative complications
- 22. Have you experienced complications with patients who return to physical activity within 4 weeks of surgery? (Response rate: 194 answered, 23 exluded from survey, 11 omitted)
 - a. Yes
 - b. No
- 23. What complications have you experienced with patients who return to physical activity within 4 weeks of breast reconstruction surgery? (Select all that apply) (**Response rate: 85 answered, 23 exluded from survey, 120 omitted**)
 - a. Seroma
 - b. Hematoma
 - c. Wound dehiscence/delayed healing
 - d. Capsular contracture
 - e. Displacement of implant/expanders
 - f. Autologous flap failure
 - g. Infection

h. Other (please specify)